# California Regional Water Quality Control Board
## San Francisco Bay Region

**Terry Tamminen**
*Secretary for Environmental Protection*

1515 Clay Street, Suite 1400, Oakland, California 94612
Phone (510) 622-2300 • FAX (510) 622-2460
http://www.swrcb.ca.gov/rwqcb2

**Arnold Schwarzenegger**
*Governor*


October 13, 2004

Public Information and Records Integrity Branch (PIRIB) (7502C)
Office of Pesticide Programs (OPP)
Environmental Protection Agency
1200 Pennsylvania Ave., NW.
Washington, DC 20460–0001

Mark Seaton
Special Review and Reregistration Division
Office of Pesticide Programs
Environmental Protection Agency, Mail Code 7508C
1200 Pennsylvania Avenue, NW.
Washington, DC 20460-0001

Dear PIRIB and Mr. Seaton:

**Subject: Revised Risk Assessments for Metam Sodium (Docket No. OPP–2004–0159)**

The San Francisco Bay Regional Water Quality Control Board is responsible for maintaining water quality in the San Francisco Bay Area to protect beneficial uses of surface and ground waters. Numerous scientific studies have demonstrated that use of some registered pesticides in accordance with Federal Insecticide, Fungicide, and Rodenticide Act requirements may have adverse effects on aquatic species. As a result of discharges of pesticides registered for use by the U.S. Environmental Protection Agency (U.S. EPA), U.S. EPA has found many waters within our jurisdiction to be impaired in accordance with Clean Water Act §303(d). The Clean Water Act requires us to prepare resource-intensive total maximum daily loads (TMDLs) for these waters. We then must mandate expensive programs to implement the TMDLs to restore the beneficial uses of pesticide-impaired waters. Through this process, we have recognized the need for U.S. EPA to minimize the potential for registered pesticides to impair surface water quality.

Metam sodium is toxic to aquatic life. In the environment, metam sodium degrades to methyl isothiocyanate (MITC), which is also toxic to aquatic life. In addition to its various agricultural uses, metam sodium is commonly used to control roots in sewer lines. Our requirements to prevent sewer line backups often trigger root control activities by wastewater agencies, sewage system management agencies, and private entities. At sufficiently high concentrations, metam sodium and MITC can interfere with operation of the biological processes in municipal wastewater treatment plants.

Metam sodium products contain a trace contaminant—n-nitrosodimethylamine (NDMA)—that is a priority pollutant under the Federal Clean Water Act (33 *United States Code* Section 1251-1387). We appreciate the Office of Pesticide Programs' commitment to work with the Office of Water and stakeholders to investigate the potential for metam sodium use to contaminate the nation's waters with NDMA. We assume that this commitment includes investigating potential National Pollutant Discharge Elimination System permit effluent limit exceedances by municipal wastewater treatment plants. Such an investigation has important regulatory implications. U.S. EPA set a water quality standard for California for NDMA when it issued the California Toxics Rule (40 *Code of Federal Regulations*, Chapter I, Part 131, Subpart D, Section 131.38). These standards are not "recommended" as stated in the revised risk

assessment—they are required. These standards form the basis for water quality regulatory programs in California and are legally binding indicators of water quality impairment.

We understand that U.S. EPA had to issue the revised risk assessments for metam sodium quickly to meet a court-ordered deadline. Apparently this tight timeline did not afford U.S. EPA the opportunity to revise the risk assessments to address the majority of our comments. As such, we are resubmitting these comments with a request that U.S. EPA complete the requested actions during the next phase of the reregistration process, such that the information will be available to inform the registration eligibility decision.

**Risk Assessment Should Review Risks to Wastewater Treatment Plant Operations**

Effective wastewater treatment plant operations are essential for compliance with the National Pollutant Discharge Elimination System (NPDES) permits we issue under U.S. EPA mandates. U.S. EPA needs to consider the potential impacts of metam sodium applications on the biological processes used by municipal wastewater treatment plants to ensure that wastewater meets NPDES permit requirements. To fulfill our joint responsibilities under the Clean Water Act, the metam sodium reregistration process needs to ensure that the maximum allowable application rate will not interfere with wastewater treatment operations.

**Product Labels Should Clearly Prohibit Use in Storm Drains**

While we understand that U.S. EPA intends to avoid use in storm drains, the current label language is unclear in this regard. The label also refers to "potable sewer systems." Clarifying the language will reduce the potential for confusion between sewer systems and storm drains, thus preventing potentially environmentally harmful applications to storm drains. We suggest eliminating references to "potable sewer systems" and adding "Do not use this product in a storm drain."

**Product Labels Should Require Notification of Wastewater Treatment Officials**

We understand that U.S. EPA intends to require notification of the downstream wastewater treatment plants prior to applications of metam sodium in private and public sewers. We believe the label language for this requirement is unclear. The notification requirement is necessary to protect wastewater treatment plant operations. The requirement also helps prevent inadvertent releases to surface waters because the contact provides the opportunity to ensure that applications (particularly private applications) are actually in sewer lines—not storm drains. We suggest that you consider the label language proposed by Los Angeles County Sanitation Districts.[1]

**Risk Assessment Should Evaluate Risks of Metam Sodium**

In some cases, metam sodium would be released to the environment instead of, or in combination with, MITC. The risk assessment assumes that transformation to MITC would be essentially complete prior to transport of the applied pesticide to locations of potential environmental effect. The analysis of metam sodium fate considers only situations where applications occur in aerobic conditions, which may not be applicable everywhere (*e.g.*, sewers). The risk assessment should consider the fate of metam sodium in

[1] "Downstream wastewater treatment officials must be informed prior to every application, regardless of size, so that potential impacts on the receiving wastewater treatment plant can be monitored. Potential impacts include unusual rotten egg or sulfur-like odors of metam-sodium above that of sewage, reduction in performance of biological treatment processes, and increased effluent concentrations of n-nitrosodimethylamine (a contaminant in metam-sodium)."

all possible application settings and should consider the potential for exposures on realistic time scales, which may be shorter than the duration necessary for 100% conversion of metam sodium to MITC.

**Risk Assessment Should Evaluate Risks of Release of Metam Sodium into Buildings**

When it is applied to control roots in sewer lines and laterals, metam sodium and its degradate MITC may vaporize and flow through sewer lines into buildings (*e.g.*, through dry traps). Product label language suggests that such releases occur. Since our requirements may trigger applications to sewers, we ask U.S. EPA to consider this risk—and to provide mitigation if needed.

**U.S. EPA Offices Should Coordinate Efforts to Protect Water Quality**

We appreciate the Office of Pesticide Programs' commitment to work with the Office of Water to investigate the potential for metam sodium use to contribute to NDMA contamination of the nation's water resources. We request that you also coordinate on the review of metam sodium's risks to wastewater treatment plant operations.

Thank you for this opportunity to offer our input regarding the Revised Risk Assessments for the metam sodium Reregistration Eligibility Decision.

Sincerely,

Bill Johnson
Pesticide TMDL Coordinator

c. Thomas Mumley, Ph.D.
Chief, Planning and TMDL Division

Susan Hazen, Acting Assistant Administrator
Office of Prevention, Pesticides and Toxic Substances (OPPTS)
U.S. EPA Headquarters 7101M
Ariel Rios Building
1200 Pennsylvania Avenue N.W.
Washington, DC 20460

Jim Jones, Director
Office of Pesticide Programs
U.S. EPA Headquarters 7501C
Ariel Rios Building
1200 Pennsylvania Avenue N.W.
Washington, DC 20460

Arthur-Jean B. Williams, Branch Chief
Environmental Field Branch
Field and External Affairs Division
U.S. EPA Headquarters 7506C
Ariel Rios Building
1200 Pennsylvania Avenue N.W.
Washington, DC 20460

Diane Beaulaurier
Central Valley Regional Water Board

Debbie Edwards, Director
Special Review and Reregistration Division
U.S. EPA Headquarters 7508C
Ariel Rios Building
1200 Pennsylvania Avenue N.W.
Washington, DC 20460

Tina Levine, Acting Director
Biological and Economic Analysis Division
U. S. EPA Headquarters 7503C
Ariel Rios Building
1200 Pennsylvania Avenue N.W.
Washington, DC 20460

Steven Bradbury, Director
Environmental Fate and Effects Division
U.S. EPA Headquarters 7507C
Ariel Rios Building
1200 Pennsylvania Avenue N.W.
Washington, DC 20460

Claire Gesalman, Acting Branch Chief
Communication Services Branch
Field and External Affairs Division
U.S. EPA Headquarters 7506C
Ariel Rios Building
1200 Pennsylvania Avenue N.W.
Washington, DC 20460

Benjamin H. Grumbles, Acting Assistant Administrator
Office of Water
U.S. EPA Headquarters 4101M
Ariel Rios Building
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

Geoffrey H Grubbs, Director
Office of Science and Technology
USEPA Headquarters 4301T
Ariel Rios Building
1200 Pennsylvania Avenue, N. W.
Washington, DC 20460

Diane Regas, Director
Office of Wetlands, Oceans, & Watersheds
U.S. EPA Headquarters 4501T
Ariel Rios Building
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

Wayne Nastri, Administrator,
Region IX, U.S. EPA
U.S. EPA Region IX, ORA-1
75 Hawthorne Street
San Francisco, CA 94105

Kathleen Goforth
U.S. EPA Region IX, WTR-5
75 Hawthorne Street
San Francisco, CA 94105

Raymond Chavira
U.S. EPA Region IX, CMD-5
75 Hawthorne Street
San Francisco, CA 94105

Glenda Dugan
U.S. EPA Region IX, CMD-5
75 Hawthorne Street
San Francisco, CA 94105

Debra Denton
U.S. EPA Region IX
c/o State Water Resources Control Board
1001 I Street
Sacramento, CA 95814

Kathy Brunetti
Environmental Monitoring Branch
California Department of Pesticide Regulation
P.O. Box 4015
Sacramento, CA 95812-4015

Walt Shannon
Division of Water Quality
State Water Resources Control Board
P.O. Box 100
Sacramento, CA 95812